

20S

AG, Germering, Germany; ⁴Technical University Munich, Garching, Germany

WOFpm 04:20 **Accurate Ion Energetics with Velocity Focusing TPEPICO Studies**; Tomas Baer¹; James P Kercher¹; Alex Lago¹; Balint Sztaray²; ¹University of North Carolina, Chapel Hill, NC; ²Eotvos Lorand University, Budapest, Hungary

WOFpm 04:40 **Prompt Ultraviolet Photodissociation of Analogous Synthetic Peptides by MALDI-TOF-TOF**; Joseph W. Morgan; David H. Russell; Texas A&M University, College Station, TX

THURSDAY MORNING ORALS

PEPTIDE AND PROTEINS: BIOMARKERS AND MASS SPECTROMETRY

Chair: Mark Dunca

Room; Theater

ThOAam 10:15 **Identifying Tumor Margins by Imagining Mass Spectrometry**; Robert L. Caldwell; Ginger E. Holt; Herbert S. Schwartz; Hans-Rudolf Aerni; Adriana Gonzalez; Pierre Chaurand; Richard M. Caprioli; Vanderbilt University School of Medicine, Nashville, TN

ThOAam 10:35 **Lung Cancer Biomarker Discovery and Pre-Clinical Validation using a Mouse Model**; Michael A. Gillette¹; Betty Chang¹; Veronica Saenz-Vash¹; Karl Clauser¹; Jacob Jaffe¹; Alice Shaw²; Tyler Jacks²; Steven A. Carr¹; ¹Broad Institute of Harvard and MIT, Cambridge, MA; ²Massachusetts Institute of Technology, Cambridge, MA

ThOAam 10:55 **Biomarker Identification and Validation with Targeted Cardiac Population Proteomics**; Urban A. Kiernan; Dobrin Nedelkov; Eric E. Niederkofer; Kemmons A. Tubbs; Randall W. Nelson; *Intrinsic Bioprobes Inc., Tempe, AZ*

ThOAam 11:15 **Proteomic Analysis of Formalin Fixed Paraffin Embedded Prostate Cancer Tissue**; Brian L Hood¹; Marlene M Darfler²; Thomas G Guiel²; Bungo Furusato³; David A Lucas¹; Isabell A Sesterhenn³; Thomas P Conrads¹; Timothy D Veenstra¹; David B Krizman²; ¹SAIC-Frederick, Inc., Frederick, MD; ²Expression Pathology Inc., Gaithersburg, MD; ³Armed Forces Institute of Pathology, Washington, DC

ThOAam 11:35 **Proteomics Approach for Identification of Hemoglobin Variants and Post-Translational Modifications**; Hua Huang; Mark E. McComb; David H. Perlman; Bogdan A. Budnik; Parminder Kaur; Timothy P. Skelton; David H. K. Chui; Peter B. O'Connor; Catherine E. Costello; Boston University School of Medicine, Boston, MA

ThOAam 11:55 **High-Accuracy Analysis of Bodily Fluid Proteomes using a Linear Ion Trap – Fourier Transform Instrument**; Matthias Mann¹; Susann Schenk²; Jun Adachi²; Gustavo A. Souza²; Lyri M. de Godoy²; Jesper V. Olsen²; ¹Max-Planck Institute for Biochemistry, Martinsried, Germany; ²University of Southern Denmark, Odense, Denmark

INSTRUMENTATION AND METHODOLOGIES FOR IMAGING MS

Chair: Bernhard Spengler

Room: 214

ThOBam 10:15 **From Profiling to Imaging of Single Neurons with Mass Spectrometry**; Jonathan V Sweedler; John Jurchen; Eric Monroe; Nathan Hatcher; Stanislav Rubakhin; University of Illinois, Urbana, IL

53rd ASMS Conference on Mass Spectrometry

ThOBam 10:35 **MALDI MSI of Compounds and Metabolites in Whole-Body Tissue Sections**; Markus Stoeckli; Richard Knochenmuss; Gregor McCombie; Dieter Staab; Tatiana Rohner; Novartis Institutes for BioMedical Research, Basel, Switzerland

ThOBam 10:55 **In situ Proteomics in Artificially Created Tissue Microwells**; Hans-Rudolf Aerni; Dale S. Cornett; Richard M. Caprioli; Vanderbilt University, Nashville, TN

ThOBam 11:15 **Imaging Mass Spectrometry Study of the Spatial Behaviour of Membrane Molecules in Single Neuroblastoma Cells**; A.F. Maarten Altelaar¹; Bas Ponsioen²; Kees Jalink²; Ron M.A. Heeren¹; Sander R. Piersma¹; ¹FOM-AMOLF, Amsterdam, The Netherlands; ²The Netherlands Cancer Institute, Amsterdam, The Netherlands

ThOBam 11:35 **Development of an Imaging Atmospheric Pressure (AP) MALDI Source for the Finnigan LTQ-FT Mass Spectrometer**; Martin Koestler; Dieter Kirsch; Arne Leisner; Bernhard Spengler; Justus Liebig University Giessen, Giessen, Germany

ThOBam 11:55 **Imaging MALDI with an Orthogonal TOF Mass Spectrometer**; Werner Ens; Gamini Piyadasa; Vladimir Collado; Hui Qiao; Victor Spicer; Kenneth G Standing; University of Manitoba, Winnipeg, MB Canada

ION SOLVATION

Chairs: Albert A. Viggiano and Anthony J. Midey

Room: 217

ThOCam 10:15 **Fundamental Aspects of Proton and Electron Accommodation by Water**; Mark A Johnson; Yale University, New Haven, CT

ThOCam 10:55 **Experimental Survey of the Attachment of Small Molecules to Atomic Cations**; Gregory K. Koyanagi; Cheng Ping; Xiang Zhao; Diethard K. Bohme; York University, Toronto, ON, Canada

ThOCam 11:15 **Spectroscopy of Micro-Solvated Multiply Charged Transition Metal Ions**; Ricardo B. Metz; University of Massachusetts, Amherst, MA

ThOCam 11:35 **Hydration Energies of Ca²⁺: First Experimental Measurements of the First Solvent Shell**; Damon Carl; Robert M. Moision; P. B. Armentrout; University of Utah, Salt Lake City, UT

ThOCam 11:55 **Structures and Energetics of Small Proton Bound Clusters**; Daniel J. Goebbert; Paul G. Wenthold; Purdue University, West Lafayette, IN

METABOLITE IDENTIFICATION USING HYPHENATED MS TECHNIQUES

Chairs: Swapan Chowdhury and Cornelis Hop

Room: Ballroom C1

ThODam 10:15 **Mass Spectrometry and Beyond: Characterization of Metabolite of New Chemical Entities**; Chandra Prakash; Kimberly A Johnson; Weiwei Wang; Tom O'Connell; Pfizer, Groton, CT

ThODam 10:35 **A Comprehensive Strategy for the Characterization and Optimization of Metabolic Profiles of Compounds using a Hybrid Linear Ion Trap/FTMS**; Jonathan L. Josephs; Mary F. Grubb; Petia Shipkova; Robert A. Langish; Bristol-Myers Squibb, Pennington, NJ

ThODam 10:55 **Identification of Unstable Metabolites using Stable Isotope Labeling and Quadrupole Time-of-Flight Mass Spectrometry**; Wei Tong; Ai-Duen Su; Swapan K. Chowdhury; Anima Ghosal; Kevin B. Alton; Schering-Plough Research Institute, Kenilworth, NJ

ThODam 11:15 **Investigation of in-vivo and in-vitro Biotransformation of ML 3403, a Potent Inhibitor of p38 MAP Kinase, by API-Qq-TOF-MS and LC-**